## Listing of all Hazardous Materials Reviewer Recommendations

## Directives, Manuals and Operating Procedures (DMP)

- 1 Review Environmental Safety and Health (ESH) SOPs annually and update or re-approve.
- 2 Review SOPs annually and update or re-approve. (same as DMP-1)
- 3 Update SOP for Hazard Communication to reference all products that include hazardous chemicals "including products obtained from sources other than traditional chemical suppliers."
- 4 Update SOP for Hazard Communication to reference all products that include hazardous chemicals "including products obtained from sources other than traditional chemical suppliers." (same as DMP-3)
- 5 Address work practices and identify the Chemical Hygiene Officer (CHO) in any Chemical Hygiene Plans that do not include these.
- 6 Address work practices and CHO in the Chemical Hygiene Plan. (same as DMP-4)
- A formal spill response plan should be prepared that describes the size and extent of spills that will be addressed with in-house staff and the means and methods to be employed. This plan should be part of spill training for manufacturing staff. (PSD)

# Management and Administration (MA)

- 1 Conduct an occupational health inspection of trapping when this activity resumes.
- 2 Job hazard analysis should be conducted for each potentially hazardous task. For those where hazards are indicated by job hazard analysis, safety procedures should be developed by the facility's safety manager in cooperation with the project manager for the activity where a hazard exists.
- 3 Safety procedures for each research project should be developed by the CHO, jointly by the project manager and CHO, or by the project manager with review and approval by the CHO. (same as MA-2)
- 4 Safety managers should make periodic inspections of areas where hazards exist to verify that work practices and controls are properly implemented. These inspections should be documented.
- 5 CHO should make periodic inspections of laboratory areas where highly hazardous agents may be present to verify work practices and controls are properly implemented. These inspections should be documented. (same as MA-4)
- 6 Exposure to zinc phosphide, cyanide, and strychnine should be monitored again by a 3rd party if possible or, with outside technical support, by the existing staff. Wipe tests for surface contamination should also be conducted. (PSD)
- PSD should consider out-sourcing environmental compliance work that can be performed on a periodic (e.g. quarterly) basis, while continuing to perform the day-to-day recordkeeping that flows into the in-house periodic compliance report systems. (PSD)

# Training Program (TP)

- Formalize training programs for each facility (NWRC and PSD) or common job type in an SOP including initial and on-going training for each area.
- 2 Formalize training program in an SOP including initial and on-going training for each lab area. (same as TP-1)
- 3 Conduct refresher training on critical aspects of BSL-3 protocol.
- 4 (optional). Insert fields in the database that indicate "next training due," and "next vaccination due." Insert a final field that subsumes all compliance deadlines.
- 5 Include mock incident training in the SOP on a periodic basis.
- 6 Assign responsibility for periodic review of compliance with the requirements of the SOP. Save all records documenting that the review is completed as required.
- 7 Include annual refresher training on critical aspects of the BSL-3 safety program.
- 8 Training program content should be formalized, provided annually or at appropriate intervals, and documented. (PSD)

### Additional Safety Staff (SS)

1 Provide junior level support to the CHO.

# Equipment, Facilities and Maintenance EFM)

- Investigate operational parameters for pressure drop on the HEPA filter, a means of checking for proper pressure drop, changes schedules for pre-filters and HEPA filters, and recordkeeping of these.
- 2 Determine the compliance requirements for filter types, filter change criteria, and pressure drops. Include in SOP for operation of the exhaust filter system. Develop recordkeeping on filter changes and (optionally) on pressure drops at BSL-3 entrance and filter bank.

## <u>Databases and Tracking Systems (DB)</u>

- 1 Implement an on-line MSDS system for facilities with computerized inventory systems. This should be integrated into the USDA-wide chemical inventory system, provided that system is not years in the future.
- 2 Implement an on-line MSDS system for NWRC. This should be integrated into the USDA-wide chemical inventory system, provided that system is not years in the future. (same as DB-1)
- 3 Develop computerized inventory systems (e.g., chemical inventory, hazardous waste) where they are not in place at this time.
- 4 PSD should consider a computerized chemical inventory tracking system. (PSD)